THE TRANSFORMATION OF CEBU CITY THROUGH THE DEVELOPMENT OF ITS TRANSPORTATION INFRASTRUCTURE (1521-1990)

Akiko KISHIUE
Assistant
College of Science and Technology
Nihon University
Narashinodai, Funabashi, Chiba, Japan
Fax: +81-47-469-5507
Email: kishiue@trpt.cst.nihon-u.ac.jp

Primitivo C. CAL
Professor
School of Urban and Regional Planning
University of the Philippines
Diliman, Quezon City, Philippines
Fax: +63-2-920-9501
Email: primcal@sk.tsukuba.ac.jp

Koichi AMANO
Professor
College of Science and Technology
Nihon University
Narashinodai, Funabashi, Chiba, Japan
Fax: +81-47-469-5507
Email: amano@trpt.cst.nihon-u.ac.jp

Hussein S. LIDASAN
Associate Professor
School of Urban and Regional Planning
University of the Philippines
Diliman, Quezon City, Philippines
Fax: +63-2-920-9501
Email: thosl@up-ncts.org.ph

Abstract: Cebu City of the Philippines has been called "Queen City of the South", but not enough attention has been paid to her historical development. The study aims to identify the growth of Cebu City as an urban center by looking at how transportation infrastructure was planned, built, and operated, as well as to discover the features, forces and key persons which had shaped urban planning in Cebu City. Focus of the study will be placed on the American Regime. It ascertains how the policies and actions of American government transformed the city's structural design formed during the Spanish conquest and influenced urban planning.

Key Words: Transportation Infrastructure Development, Urban Development

1. INTRODUCTION

The study is the historical perspective of the development of the City of Cebu, the first capital of the Philippines. Today, Cebu plays significant roles in the economic and social activities of the country as one of the leading regional centers, forming metropolitan. The study aims to be aware of the history and relationship of urban planning and transportation infrastructure development of the City of Cebu to provide further understanding of the forces which have shaped planning there. This is a step to establish the fundamental concept of the Asian style of city planning.

2. PHASE I: OVERVIEW OF SPANISH OCCUPATION (1521-1860)

2.1 Influence of Spain on the Settlement Pattern of Cebu

Legazpi proclaimed the establishment of the first permanent Hispanic settlement in Southeast Asia in 1565. The name of Villa de San Miguel was given to it. For four years since the declaration, Cebu was the base of Spanish operation in the Philippines. The set of Royal Ordinances, known as Law of Indies was enacted in 1573 by Philip III for the Spanish colonies and it was also implemented in the Philippines. It established uniform standards and procedures for planning and administration. Features of the law were grid-iron street pattern, plaza complex, settlement concept of "de bajo de las compañas - under the bell", ethnic segregation, among others.

Despite the enactment of the law and establishment of several Spanish buildings, no such significant change emerged in the urban development and townscape of Cebu for another two centuries. Cebu in 1573 was described by Guido de Lavezaris as "almost deserted and its inhabitants were roaming about in the neighboring islands"(Blair *et al* 1909). Careri (1963) also, recorded " Zebu (in 1696) decayed and came to be a small village". Even in the late 18th century, Guillaume Le Gentil noted that " the City of Cebu – which really should not be called a city- is an assemblage of a few miserable huts, as are all the native dwellings"(Mojares 1983).

During the Spanish time, huge religious buildings were built by friars in the City that emphasized power of the church in government as opposed to the small nipa hats built by natives. The settlement pattern in Cebu around 1850 was, as shown in Plate 1, still basically along the seacoast without no expansion towards the mountains. The dots in the map (Plate 1) indicated the settlements stretched along seashore in Cebu and Mactan Islands, respectively. Except the areas of San Nicolas and the City of Cebu, no village agglomeration was observed.

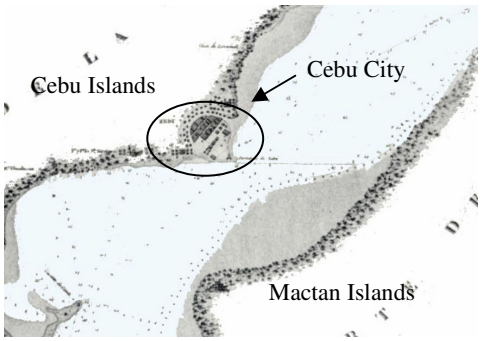

Plate 1 Plano 1850,
A portion from the MAP: Plano a Sur America y Filipinas - Dots in the figure indicate the settlements

Major reason for the failure of development of Hispanic townscape in Cebu was the transfer of trade center from Cebu to Manila. Cebu functioned as the Capital of the Philippines since1565. However, after six years from its declaration, it was replaced with Manila. Cebu's galleon trade was ended by 1604 with the trade records in 1596 and 1597. The limited trade items allowed for the Galleon from Cebu were not able to make great profits against huge transportation cost. Therefore, most Spaniards moved to Manila after the end of Cebu's participation in the Galleon trade (Mojares 1983). In addition, the colonial management system of Spaniards was another serious cause. According to Corpuz (1999), the average term of the governor-general from 1574 to 1898 was only 2.8 years. Infrastructure projects were not, therefore, attractive to governor-generals.

In spite of the end of Cebu's participation in the galleon trade and withdrawal of the capital city of the country, the City of Cebu still served as the provincial capital, oldest city of the country, and a military headquarter of Visayas. These functions helped avoid the fatal devastation of the City.

Although no such significant change happened in the urban development and townscape of Cebu for the first two centuries, the settlement segregation by ethnicity, which was thoroughly carried out, established the three distinctive districts in the Cebu: brick and massive structures of Ciudad (old Cebu) for Spaniards and Spanish mestizo; Parian for Chinese; and nipa hat of San Nicolas for native Filipinos. By the middle of 19th century, approximately, a 20,000 population level was recorded with San Nicolas and Parian as most dense (Mojares 1983).

New land ownership patterns in Cebu were established under the Spanish occupation. Mojares (1983) discussed that four entities, namely, Augustinian order, Diocese of Cebu, the Seminario de San Carlos, and the City government of Cebu owned more than 70 percent of entire Cebu by the end of 17th century. The ratio of ownership by the four entities increased to 92 percent by 1826. Private residents during the Spanish time basically leased the lots from the Church.

2.2 Transportation Infrastructure Established by Spaniards

The Spaniards introduced the grid-iron layout and segregated the settlement pattern but the urban morphology they introduced did not include the significant development of transportation infrastructure. As the road network developed under Spanish period was narrow

and inadequate, it did not make substantial difference in the development of land transportation and enhanced the dominance of the water transport in Cebu. This timeframe was, from the viewpoint of transportation, categorized as the non-motorized period. The major modes of transportation in Cebu during this time were water transportation, Carabao, horse carriage, and walking.

In 1850, native ponies were utilized in the large communities in Cebu (Roschlau, 1985). The utilization of horse carriages in the Philippine was recorded in the middle of the 19th century (Iwata, 1995). Horse-drawn vehicles were already the main transportation modes in urban areas of the Philippines in 1850 but the design and capacity were different from region to region. The Calessa, a two wheeled horse carriage for two passengers was used in Manila, while Tartanilla, slightly larger than Calessa and could accommodate four seated passengers, was utilized in Cebu.

3 PHASE II: FIRST TRANSFORMATION OF THE CITY OF CEBU (1860-1898)

3.1 Emergence of Cosmopolitan Cebu

The significance in economic development was recognized by the Spaniards, by the second half of 18th century. One of the breakthroughs was the opening of ports in the country to world trade. The first port open to world trade in the country was the port of Manila in 1834, followed by the port of Cebu in 1860. The opening of the Cebu port to world trade produced more economic opportunities for elite Filipinos and Chinese.

Immigrants from the South China increased and they composed 7 percent of total population of Cebu in 1891, which was 14,099 (Mojares, 1983). American, British and European started dwelling and establishing business firms in Cebu. The number of Spaniards in Cebu also increased again after 1860. Representatives of foreign business firms were also observed. Some of the big firms were Smith Bell & Co.(U.K.), Loney Kerr & Co. (U.K.) Russell & Sturgis (U.S.A.). Also, in 1880s there were counselor agents from U.S., U.K, Germany, Denmark, and Venezuela in Cebu (Mojares, 1983). In addition to the new ethnic composition of the populace, the emergence of foreign firms and counselors introduced new social mechanism such as bill of exchange, insurance agents, and vehicle ownership into the City.

The opening of the Cebu port to world trade accelerated the urbanization level of Cebu City. The population of Cebu City in the 1903 census was 31, 079 and half of them were found in twelve districts of the inner city of Cebu. The population level of Cebu as of 1903 was more than twice that of 1891 at 14,099. The number of foreigners in Cebu city and San Nicolas was 1,115 which composed of more than 5 percent of urban population, including 793 Chinese, 126 Americans and 105 Spanish (Mojares, 1983). The increase of the population in Cebu after 1860s was mainly due to the emergence of the large number of workers in the tertiary industry, 16.6 percent of total population of the City in the domestic and personal services, and 19.4 percent in trade and transportation (Mojares, 1983).

3.2 New Transportation Infrastructure

Although the opening of the Cebu port to world trade produced economic development and urban development in Cebu city, transportation infrastructure development in Cebu remained low. The main transportation mode was still water transportation. New motorized transportation mode, inter-island steamer, was introduced in the Cebu during this phase. The steamer reduced the much of travel time and made long distance travel easier. By the end of 1860s, travel from Manila to Cebu took only two days by steamship.

Corpuz (1999) discussed several reasons for the failure of insular transportation development. First, the development of the insular transportation system had to have the blessing of the friars which was hardly obtained since the friars opposed civilian supervision. Also, the financial capability of the colonial government was another reason since development and management of extensive transportation system was costly. Moreover, it was unfeasible to give another burden to the natives since they were already suffering from the labor services. It was the Spanish policy to discourage the development of the transportation system, and for the friars, development of the transportation system was nothing more than to create the additional risk to their position and authority by providing accessibility to the natives.

4 PHASE III: ESTABLISHMENT OF CITY FOUNDATION (1900 -1942)

4.1 Spaniards to Americans

When the sovereignty over the Philippines transferred from Spanish to American in 1899 through the Paris treaty, the Americans provided different approaches from the Spaniards in managing the Philippines. President McKinley expressed the policies towards the Philippines as follows: "the Philippines are ours, not to exploit, but to develop, to civilize, to train in the science of self-government. This is the path of duty which we must follow, or be recreant to be a mighty trust committed to us" (Forbes-Lindsay, 1906).

The Taft Commission was assigned to Manila in 1900 by President McKinley. The Commission was authorized " the making of rules and orders, having the effect of law, for the raising of revenue by taxes, customs, and duties and imposts; the appropriation and expenditure of public funds of the islands; the establishment of an educational system throughout the islands; the establishment of a system to secure an efficient civil service; the organization and establishment of courts; the organization and establishment of municipal and department governments, and all other matters of a civil nature for which the military governor is now component to provide by rules or orders of a legislative character"(Forbes-Lindsay 1906). The main concern of the American government on the colony was to develop basic foundation of the country. The Philippine government has been authorized to borrow money from time to time from American government for public improvement, such as harbor works, bridges, roads, etc. as well as to issue bonds with interest not exceeding 4.5 percent per annum. (Report of the Philippine Commission (RPC), 1905)

4.2 Transportation Infrastructure Development during American Regime

As stated by President McKinley, one of the foremost concerns upon the sovereignty over the Philippines was the public improvement of the country, including the development of transportation infrastructure and communication facilities. There were several obstacles for the infrastructure development in the Philippines which had been ruled by the Spaniards for 300 years such as rules and orders, land ownership, and institutional capability.

a) Road and Bridge Improvement and Construction

Much attention was paid for the repair and construction of roads and highways. The Bureau of Engineering concluded the importance of road improvement, through the recommendations by provincial officials, for 1) the official trips; 2) the operations of the constabulary; 3) the extension of mail route; and 4) more particularly, the development of fertile agricultural regions by reducing the cost of transportation of products (RPC, 1904). Through these objectives, we can comprehend that road networks connecting the cities and suburbs were underdeveloped or in poor condition even though the Spanish laid out the grid iron street pattern in Ciudades.

Insular fund for road construction was prepared and distributed for the eleven provinces including Cebu province in 1904. Three components of highway construction were planned for Cebu: Carcar-Barili; Naga-Toledo, and Sogod-Taburan. The construction of the Carcar-Barili section was mobilized on January 18, 1904 and the Sugod-Taburan section would be started at the end of the year (RPC, 1904). Whereas, construction of the Cebu-Toledo road was come off upon Act No, 1329 in 1905 with the abandonment of the Sugod-Taburan road.

Plate 2: Road Construction
Base map source:
http://allhotelsandresorts.com
/maps/cebu-map.htm

Report of Philippine Commission (RPC 1904, 1905) recorded that in the fiscal year 1904, 32, 314 miles of road were constructed while 94,579 miles were repaired in Cebu province. Also, 14 bridges were constructed and two bridges were repaired in the same year. In the same manner, 3,052 miles of road were constructed while 36,790 miles of road were repaired in 1905.

Not only the insular government but also local governments conducted the improvement of roads and bridges. It was a fact that although repair and construction of provincial and municipal roads were planned and in utmost urgent, not enough fund was available to many local governments. In that situation, municipality of Cebu set aside one of largest appropriation for the public works. Appropriations of Cebu province for the roads and bridge improvement during the early 19th Century were as shown in Table 1.

At the provincial level, the road from Cebu to Mingianilla; Carcar to Baril; and Cebu to Consolacion were constructed or repaired including the bridges in the area by 1905.

Table 1. Appropriation for Road and Bridge Improvement

	1903-04	1904-05	1906-07	1907-08
Cost (Pesos)	47,908.90	45,572.44	20,175	74,976

Source: Report of the Philippine Commission 1904, 1905, 1906, 1907, 1908, 1909, 1910

City Beautiful Movement and Urban Planning

As mentioned previously, it is assumed that American government focused on the development of accessibility and network between Cebu City and other towns in the province. Boulevards in Cebu City such as Pres. Osmeña Blvd., Juan Luna, Mango, etc were built during this time. Though there was not any master plan prepared for the City of Cebu by Daniel Burnham unlike the Cities of Manila and Baguio, the influence of city beautiful movement in Cebu was recognized along the boulevards, Capital Hall, and Fuente Osmeña.

Plate 3: Hall, circa 1940
Source: City of Cebu 1521-1977

Fuente Osmeña, park and plaza of the City was completed in 1912 (Mojares, 1983). In March of 1912, the consulting architect who was appointed by the General-Governor visited the City of Cebu to conduct a study for the preparation of future development and beautification plans (RPC, 1912). The plans included as many possible locations in the provincial government center. One of the submitted plans was adopted and modification was made on it. Capital Hall of Cebu was built in Osmeña Blvd in 1938. It was designed by Juan M. Arellano who was Filipino and studied in Philadelphia, U.S.A. The location of Capital Hall is considered not only the application of the grandiose

vista approach and creation of the 'sense of power (Cullen, 1971)'in the Osmeña Boulevard, but also the intention to build new city center, apart from old downtown. (Plate 3)

Road Law

Road and bridge improvement was one of the prioritized actions taken during the American period, and new highway and bridge constructions were carried out. However, deterioration of roads and bridges constructed and/or repaired by the insular government was also reported due to the mal maintenance practices by local governments.

In view of this, a Road law was passed on July 13, 1906 (PRC, 1907). It authorized provinces and municipalities to compel every person liable, to the payment of a cedula to work for five days in each year on the roads or to pay a commutation in lieu thereof. However, local governments were not ready to accept the road law although it was necessary for the establishment of maintenance capability by local governments. As a result, the system to impose penalty, in case where road deterioration was found, except for four provinces, Cavite, Bulacan, Tarlac, and Nueve Ecija. The four provinces accepted the law doubling the cedula tax to participate in the P 2,000,000 insular money for road purposes (RPC, 1907).

b) Railway and Tramway

In the early stage of American sovereignty, the significance of railroad system in the Philippines was repeatedly stated as follows: "demand for additional railroads is constant, pressing and insistent and comes from all classes and directions"(RPC, 1904) and " the need of additional modes of transportation in the island has from the beginning been realized as most urgent, and their existence as necessary to any large progress"(PRC 1906). The concept of extension of railway on the Cebu Island was discussed by the Governor-General of Cebu.

Plate 4: Train station in 1910s (Cebu City)
Source: Déjà vu (1994)

In June 1906, proposal for railroad construction in Cebu was advertised and the bids were opened in December of the same year. However, none of proposals submitted for the advertisement were able to comply with the Terms of Reference (TOR) and call for the proposal was re-advertised in January next year. For the second bid advertisement, the Visayan Syndicate submitted the proposal for the railroad in Cebu Island. The Visayan Syndicate, composed of Messrs. William Salemon & Co. Correlius Vanderbi, J.G. White & Co. (New York), and Charles M. Swift (Detroit), won the proposal and their concession was transferred into the Philippine Railway Company (PRC, 1906).

In 1907, over 20 miles of track have been laid from 0.5 mile south of Cebu City to a few miles north of Danao and first class coaches were on the way to Cebu in September. With the completion of another 31 km track near Carcar to Argao by the Governor–General in July 1907, 59.4 miles started the service on June 10, 1908 through the highly populated Cebu Island from Argao to Danao. In 1910, it was placed in full commercial operation. For the third class passenger, railway cost 1.2 cent/miles in 1910. (RPC 1910) The location of line and stations were found in the Map of 1913. (See Plate 5)

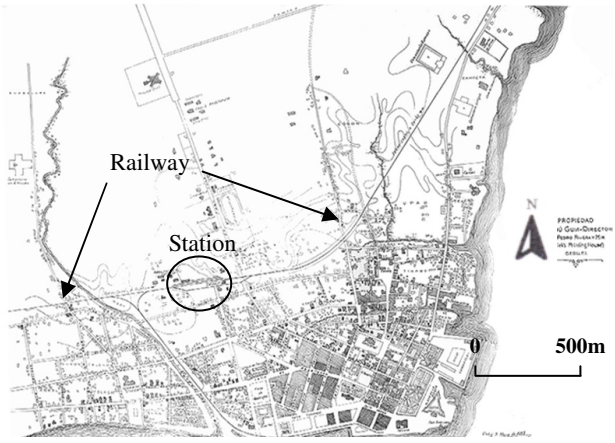

Plate 5 Cebu City 1913*, Source: Casa Gorordo

The development of railway in Cebu was considered the key factor to the commercial and economic development of the Island by providing the freight means and connecting the capital and the suburbs. Plate 4 shows the busy station in Cebu City where the South Bus Terminal today is located. The railway station was not placed within the old city but on the boundary between the old city and new city. Although the availability of land might be the main reason why it was not placed within the downtown, it is also considered as the result of the plan or vision prepared by Americans to establish the new city center separate from the old downtown.

Though emergence of the railway in Cebu was one of the milestones in its transportation history, the Philippine Railway Company in Cebu was never able to benefit from the business. By the 1930s, railroad passengers had shifted to another transportation mode, Bus. The situation of railway in Cebu was recalled in the Suns Star Newspaper (Sep.11th, 1994) as follows: "*.. the railroad was not too popular with the general riding public. …….in the 1930s, stiff competition was offered by bus companies. Bus rides did not only cost less, they were more congenial to the habit of local travelers. Slower and more round-about, with frequent stops…….Native style of traveling killed the railroad.*"

The detailed study was, technically, conducted to decide the most suitable coach gauge for each lines based on the experiences of other Asian countries, such as India, China, Japan, and Korea, comparing western experience. However, American government was not able to recognize culture and the travel behavior of Cebuanos. Here we can find the difficulties in Planning. From the year 1920-1930, 78 percent of the railway revenue of PRC in Cebu dropped and in 1937, the franchise lapsed.

In addition to railway, the electric tramway was also planned for Cebu city in the early 1900s (Roschlau, 1985). Two attempts were recorded and a plan was prepared only for within the City. However, objections from the Philippines Railway Company interrupted the actualization of electric tramway due to competition.

c) Emergence of First Automobiles

Until 1910, there was no record of automobile in the Province of Cebu. The American Army officer brought the first automobile to Cebu City in May 1910. By the 1937, there were five land transportation companies in Cebu: Cebu Auto Bus Company, the Bisaya Land Transportation Company, the Cebu Transit, The Lozada, and the L. Yongxo Transportation Facilities. Motorized transportation business within Cebu City after the introduction of transit service and taxicab service was carried out by the Cebu Transit and Bisaya Transportation (Gwekoh, 1937). Tartanillas were still utilized within the City with the fare of five sentavos per ride. Other transportation modes within the city also cost a minimum charge of five sentavos per ride. More than 1,000 tartanillas and 78 cars were available in 1930s (Gwekoh, 1937).

d) Port Improvement Project

One of the prioritized projects during the American Regime was port development and much attention was paid to the development of the Iloilo and Cebu ports, in addition to the port in Manila. Prior to the harbor project, construction of 30 feet wide temporary timber wharf at Cebu begun in March 1904 and completed in September 1904, being conducted by Messrs. Jones & Smith, Manila (RPC, 1904, 1905).

Plate 6 Cebu Harbor Circa 1916: View along the Wharf <Velez Collection> University of San Carlos

From 1904 to 1913, port improvement in Cebu was carried out by the government. One

project included "the construction of a concrete masonry dock and bulkhead about 2600feet long, the reclaiming of about 13 acres of land adjacent to the already congested business portion of the city, and provides for vessels of 23 feet draft and for future extension of docking facilities when needed" (RPC, 1903). The construction of the port, following to temporary wharf, mobilized in April 1905, contracted by the J.G. White & Co. of New York which was also the syndicate member for the railway development in Cebu (RPC, 1904, 1905). The 2,309 feet wharf became available in Cebu on April 15, 1908.

The completion of the port expected to bring more business and industrial development as well as better sanitation and beauty in the City. Since Cebu was the trade center of not only Visayas but also the country, improvement of its facilities would gain economic value not only in Cebu but throughout the country. In fact, as we can see in the Plate 5**,** the Port of Cebu had the significant advantage of direct access to the railway.

According to Gwekoh (1937) the following big international trading companies located their firms in the City of Cebu by 1937: Pacific Commercial Company, Smith, Bell and Co., Ltd, Ker and Co., W.F. Stevenson and Co., Procter and Gamble Trading, Philippine Refining, Warner Barnes & Co., Madrigal and Co., Compana General de Tabacoe de Filipinas, International Harvester, Daido Boeki Kaisha, Ltd., Mitsui Bussan Kaisha., etc.

With the improvement of port facilities, the port of Cebu became the second biggest in terms of size and significance in the trading of the country. Though data during 1910s to 1920s were not found, the data of exports volume from the port of Cebu to U.S.A and foreign countries during 1930s are presented in Table 2. It is enough to understand that the port of Cebu had increased its significance in the trading industry. Also, U.K., Japan, China, Spain, Netherlands, Norway and Sweden maintained vice-consulates in the City of Cebu (Gwekoh, 1937).

Table 2 Export Volume from Cebu Port

Year	1932	1933	1934	1935	1936
Volume (PhP)	20,678,225.12	28,484,818.74	28,208,644.55	32,818,517.44	43,692,898.08

Source: S.H. Gwekoh The Golden Book of Cebu, 1937

4.3 Urban Renewal

Urban renewal type area development was conducted in the early 1900s. The program was prepared for the district destroyed by the three consecutive fires of 1902, 1903, and 1905. The urban renewal development was facilitated in the old business center in the City of Cebu with 13ha in size, bounded by Escolta, Infanta, Alcarazo, Nao Victoria, and B. de Garay. The blueprint to make the area a model district was prepared by the T. Warren Allen, who was the district engineer for Cebu, Bohol, and Oriental Negros. The development included widening and straightening of roads with sidewalk, height control, and design control (PRC, 1905).

Relph (1999) discussed that the heights control was applied in late 19th Century for the improvement of design and layout of buildings and towns in the western countries. Also, with the legal bases, height control can be found in the zoning ordinance of New York in 1916 through the recommendation by the Commission of the Heights of Buildings in 1913. Therefore, latest planning tools were utilized in Cebu in 1905. Since main transportation modes during this time in Cebu were walking and non-motorized Tartanillas and automobile was not introduced in Cebu until 1910, we can believe that this plan had the vision for building of business center of the future with automobiles by proving wider roads for vehicles as well as the safety for the pedestrians through the American experience.

To provide an area for pedestrians and vehicles, it was necessary to widen and increase roads. Technique to do so was sort of land readjustment where the area of each lots was reduced, but the value of the lots increased one third (RPC, 1906).

5. PHASE IV: DARK TIME AND RECOVERY FROM THE DESTRUCTION (1942-1970S)

5.1 Arrival of Japanese and World War II

W.W.II. began and Japanese forces started invading the Philippines on December 8th, 1941. They established a military administration in Manila on January 2nd, 1942 which was the beginning of Japanese occupation for three years and eight months in the Philippines. The approach that the Japanese took for the management was the patronization of autonomous government by Filipino elite established during the Commonwealth period (Ikehata *et al*. 1999). However, not only collaboration but resistance against Japanese forces were formed throughout the Philippines from the beginning of Japanese occupation in the country.

On April 10, 1942, Japanese landed in Cebu. The port of Cebu was utilized as the navy station for the Japanese. One of the main reasons for the conquest of the Philippines was the country's mineral resources. In Cebu, private Japanese firms carried out developments of copper and coal after the invasion (Ikehata *et al*, 1999). It was considered that the availability and accessibility of Cebu by roads, railway, and port, which were built and improved during American regime, encouraged the Japanese military to occupy Cebu. Cebu was the most populated island in the Philippines according to 1939 census (Karl, 1909). Meanwhile, Guerilla resistance against Japanese forces in Cebu was maintained, though GHQ recognition was not provided until early 1944 (Briones, 1970).

5.2 Deterioration and Destruction of City Structure

An attack by U.S. force was launched on Manila on February 3rd, 1945. For the next months, attacks were spread out on the Philippine Islands. There were so many cities in the Philippines which had serious damages during World War II.

Cebu was no exception. It became the target of the US force became during the Japanese occupation the Cebu became one of the most important Japanese navy bases in south of Manila. More than 50 percent of City was destroyed through the war, which included railway, roads and a number of buildings. It was recorded that the war produced 180,000 homeless and destitute in the City. (City of Cebu)

The condition of the city right after the war was as follows: "*When the war-weary Cebuanos returned to their homes, they found only gaping holes and debris, the hulking cadavers of bombed-out buildings throwing long dismal shadows on its once busy streets. Even the churches, some of the very oldest in the country, were not spared. The bombs and the shell that fell on this defenseless city shock them to the very foundations and, in a matter of seconds, destroyed what took past generation of Cebuanos years to build with bare loving hands*." (City of Cebu, 1951)

Ironically, Roschlau (1985) mentioned that the transportation facilities built during American regime were utilized by Japanese forces, and they were destroyed by the Americans during the War.

5.3 Rehabilitation/ Recovery of Queen City of the South from her Destruction

After the war, the Philippines became an independent country on July 4, 1946. However, it was not actual independence of the country from U.S.A. The Philippine government had no choice but to accept the Bell Trade Act, which set the twenty eight years preferential duties with eight years of duty free since the implementation of the Philippine Rehabilitation Act would be withheld without the ratification of the Bell Trade Act. This means that the Philippines' dependence to the US government still continued after W.W II..

Philippine Rehabilitation Act was enacted on 1946 that was the Public Law 370, 79th Congress of the United States. Focus was placed on the rehabilitation, improvement, and construction of public roads and bridges, port, and harbor facilities, public property, public health facilities, etc. President Manuel Quezon created the Commission on Planning, Priorities, and Allocations to coordinate and collaborate with the representatives from United States to carry out this act.

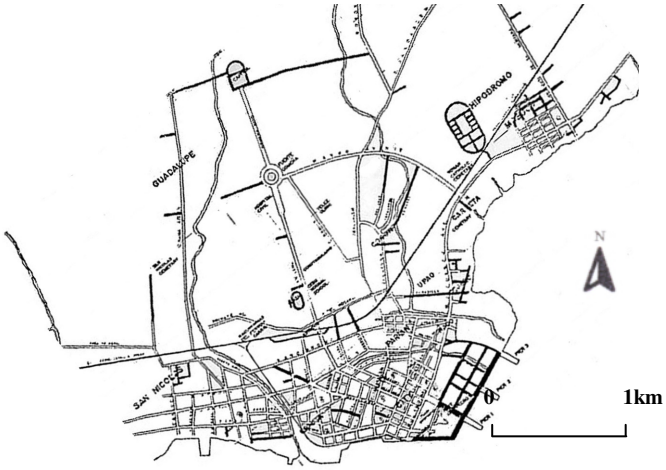

Plate 7 Cebu 1940*
Source:
(Gam Borromeo,
Cebu City Historic Sites Survey)
Modified by Author:

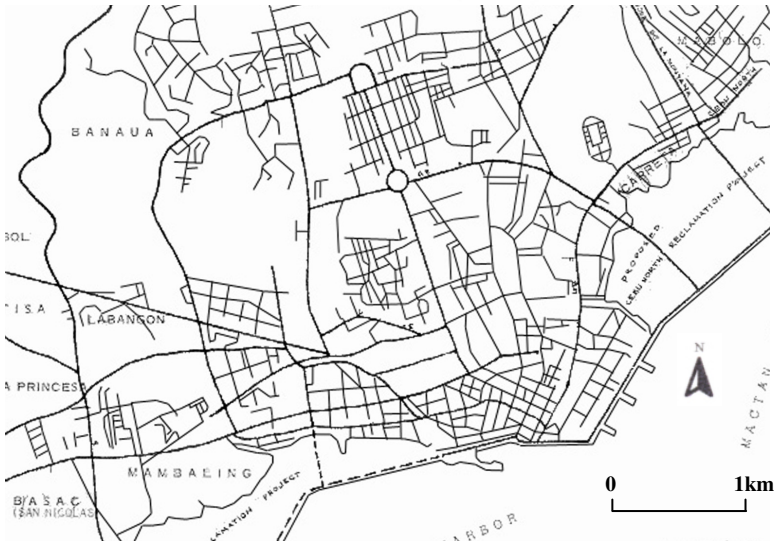

Plate 8 Cebu 1967*
Source:
(Framework Plan of Cebu City)
Modified by Author

In three years after the War, the City was rebuilt as it was (City of Cebu, 1951). However, political situation of the City was not stable. From 1945 until 1955 when Osmeña Jr. was elected as a city mayor, nine mayors were appointed or elected during only a decade. A political leader who is one of the major decision makers in the preparation of plans was lacking in the City of Cebu during immediate post war.

Regarding rehabilitation level from the viewpoint of the financial condition, Table 3 also gives us an idea that the City was capable for the development and rehabilitation of basic infrastructure constantly.

Table 3 Financial Condition of Cebu City

	Streets and Bridge Fund			Water Works		
	Revenue	Expenditure	Balance	Revenue	Expenditure	Balance
1947	320,058.53	235,884.35	84,174.18	159,085.51	156,586.79	2,498.72
1948	381,894.64	298,786.13	83,108.51	264,939.65	223,586.79	41,313.24
1949	425,889.48	206,684.06	219,205.42	442,242.43	271,500.95	170,741.48
1950	588,688.09	316,869.15	271,818.94	867,811.47	767,744.80	100,066.67

Source: The City's Finance, Cebu City (1951)

Urban Planning

After the war, it was clear that the reconstructions of Manila and other cities in the Philippines were indispensable. Moreover, the government recognized the necessity of urban planning for the reconstruction of urban centers. Accordingly, in 1946, the National Urban Planning Commission (NUPC) was created under Executive Order (E.O.) No. 98 by President Osmeña to prepare general plans for the development of urban areas. By E.O. No. 367, the National Planning Commission (NPC) was created in 1950 and absorbed all the functions of the NUPC, Real Property Board, and Capital City Planning Commission. Local Autonomy Act of 1959 (Republic Act (R.A.) No. 2264) was enacted to empower the legislative bodies of cities and municipalities to enact zoning regulations and subdivision regulations.

In the City of Cebu, the City Planning and Development Board (CPDB) was recreated during 1950-1960 and through the Local Autonomy Act of 1959, the CPDB became independent from the NPC. It is recorded in the "Framework Plan of the City of Cebu, 1976" that with the said amendment, the Office of Zoning Administrator of Cebu City was revived and Ordinance No. 102, Zoning Regulation of Cebu City was enacted. It was the first zoning ordinance and planning tool prepared for the entire Cebu City. However, the study was not able to find out any trace of the ordinance in the materials researched. Therefore, it is impossible to discuss here its contents, effect and implementation after the enactment.

Infrastructure Development

There were several big and milestone infrastructure projects in post-war time. Lahug airport was built in Lahug, Cebu City. It was an all-weather feeder airport and served to private light planes. With Lahug airport's limitation for expansion, Mactan International Airport (MIA) was built in Lapulapu City, Mactan Island in 1967. The same year the MIA operationalized, the construction of the Mactan-Mandaue Bridge started. It was completed in 1973 and became the first land transportation infrastructure connecting Cebu Island and Mactan Island. The transportation mode available before the completion of the bridge was only a ferry operated by the Quano family. Therefore, without any doubt, the completion and operation of the Airport and bridge provided the significant effects on the accessibility, economic development, and expansion of the urban center.

Another remarkable infrastructure development undertaken was the Port Development and North Reclamation. Over 11,500 ocean-going vessels reached the Port of Cebu (Holganza), but the existing 2,615-meter of berthing space was inadequate to accommodate those number of vessels. In addition, by the 1960, the congestion in the downtown and port area became a serious disturbance for the economic development of the City. In the downtown area, roads were still narrow, and without adequate sidewalks. Flood was often experienced after strong rains. To address these problems, a project of around 160ha reclamation area and the expansion of the port facility with additional 2,200-meter wharf was proposed and approved in 1960. The project was financed by the City and completed in 1969. For the reclamation area, a development plan was prepared for each district. This project expected to produce the additional commercial and industrial spaces and better infrastructure as well as to provide job opportunities for the citizens.

Regarding transportation modes in the City of Cebu, the Jeepney started functioning as the major public transportation within the City. Jeepneys were brought from Manila and started expanding their share among public transportation in the City. Tartanillas business was very successful in 1950s and 60s. 1475 of available units in 1951 increased to 2425 in 1960 (Roschlau, 1985). However, the increase of Tartanillas in the narrow and busy streets in the City caused serious congestion problem. To control the further increase of Tartanillas, an ordinance to set the maximum number of 2500 units with registration was enacted in 1960 (Roschlau, 1985). Since it was really intended to reduce the number of Tartanillas, the license, which was not able to renew in three months after the expiration, would not be issued anymore.

Bus, also served as the major public transportation within the City but it was utilized rather for provincial travel. The bus business in Cebu had been monopolized by the Cebu Auto Bus

and Visaya Land Transportation until sometime in 1950s. However, establishment of other two Bus Companies, Corminas Bus Company, and Lozada in 1955 and 1957, respectively, brought strong competition among the four. The motorized bicycle was introduced in Cebu in 1953. Although the motorized bicycle became popular, it was replaced with the tricycle introduced by the Japanese manufacture Yamaha before 1960. The post-war era offered diverse transportation modes in Cebu. However, railway destroyed during the war was, unfortunately, never built again in the City. (Roschlau, 1985)

6. PHASE V: MODERNIZATION OF THE CITY TOWARDS METROPOLITAN CEBU (1970S –90)

6.1 Challenges to be the Authentic "Queen City of the South"

With the huge infrastructure projects during the 1960s, the City of Cebu gained economic stability and extended the area of its economic activities beyond the city boundary. It created the concept of Metropolitan Cebu as the physical and socio-economic agglomeration. The term Metro Cebu has been used broadly, but does not have any legal bases nor fixed definition.

Though economically successful, infrastructure development without urban planning in the City could not solve the urban problems such as traffic congestion, lack of urban services, squatters, confliction of land use, paucity of recreational facility, etc. Rather, some of the problems were worsen through the development of infrastructure by enabling goods and people to concentrate in the center. Little by little, the significance of urban planning for the City was recognized and in 1976, framework plan was prepared by the city government. The ultimate goal in this plan was to "give the inhabitants of Cebu City a more healthful, safe and orderly environment". Finally, the challenge to be the authentic "Queen City of the South" started.

6.2 Integration of Infrastructure Development and Urban Development into Urban Planning

Followed by the Framework Plan of Cebu City in 1976, the Metro Cebu Land Use and Transport Study (MCLUTS) was established in 1978. It was carried out from 1978 to 1980 by University of the Philippines-PLANNADES and REDECON-Australia on behalf of the Philippine government and Australian government, respectively. It was the first comprehensive planning for the land use and transport of the City. MCLUTS prepared four plans for the Metro Cebu based on the careful analysis, forecasting, and evaluation process. Among the four plans, Plan 2 which proposed the Concentrated, with reclamation project was selected for Metro Cebu. Also, short to medium term recommendations on public transportation were provided, making the CBD as the most accessible and the center of commercial and educational activities. The main recommendations prepared were as follows: a) lifting the ban on issuance of franchises for buses and jeepneys; b) stopping of the issuance of operating permits for new tricycles; c) phasing out of the operation of PU which was a modified taxi without meter; d) prohibiting the entry of tartanillas into the CBD during peak periods.

MCLUTS became a part of Central Visayan Urban and Rural Project (CVURP) which was set up in 1981 through E.O. No. 694 funded by the World Bank funding. CVURP was composed of 5 sectors: Transport; Urban Services; Shelter and Livelihood; Industry; and Local Government Finance and Management. Through the MCLUTS, necessity of integration of urban planning and transport planning, as well as understanding of the character and peculiarity of each locality in the planning were recognized.

Prior to MCLUTS, a Japanese firm, Mitsui Consultants conducted a survey of public transport requirements in eights cities in Southeast Asia (Roschlau, 1985). Through the survey, the creation of a roving committee of planners and engineers to assist in a transition to full-scaled buses and corporate management from intermediate technology and organization in the City of Cebu was recommended. Also, closer co-operation between regulatory agencies in central and regional levels to reduce the number of jeepney franchises issued and avoid the public transport industry from suffering "excessive competition" was suggested.

The Special Assistance to Project Formulation (SAPROF) conducted under Overseas Economic Cooperation Fund (OECF) in 1989, not only pointed out the necessity of a master plan for Metro Cebu to guide its urban development but also suggested the formulation of a Metro Cebu Development Authority for the implementation of projects on the regional level.
The Metro Cebu Development and Related Project Feasibility Study in 1989 defined that the development of Cebu has been linear and directly related to the transport system. By 1990, it became apparent for a master plan for the City to be developed that will integrate transportation infrastructure development and urban development.

In 1989, the three phased Metro Cebu Development Project (MCDP), founded by Japan Bank for International Cooperation (JBIC) formerly OECF was implemented. This was the first multi-component comprehensive development project for Cebu City as well as Metro Cebu.

7. ANALYSIS

This section discusses how the City of Cebu was transformed through the development of its transportation infrastructure, focusing on its historical development and planning patterns. Summary table for the transportation infrastructure development and urban development is illustrated below:

The Law of Indies gave the direction to the town planning and settlement pattern as a town in Cebu was established by Spaniards. From the Spanish occupation to the opening of Port to World trade in 1860, however, the development of the City was limited to the Ciudad, similar to the other cities in the Philippines and in South America. Moreover, since development was carried out by the friars, not enough attention was paid on the transportation infrastructure development in the City. Also the replacement of capital with Manila was another reason for the limited development and expansion of the City during the period of 16th to middle 19th centuries.

The situation slightly changed when the Port was open for the world trade. Opening of the Port resulted in the influx of people and goods into the City. Not only foreign firms, but also counselor agents from U.S.A. and European countries were located in the City. Urbanization level by the Filipinos increased after the opening of Port. However, these changes let neither any distinguished infrastructure development nor planning system development.

The transportation infrastructure drastically improved and developed under American sovereignty over the Philippines. American prioritized the transportation development including road network, port facilities and railways. Roads connected east coast and west coast of the Cebu Island, and port facilities were remarkably improved to make the city serve as a main trading center of the country. Railway linked north and south of the City over 59.4 miles. During about 40 years American regime, much more road network development within the City was done than during more than 200 year Spanish occupation. Transportation infrastructure development was considered one of major significant growth factors for American policy though it was considered one of major causes to threaten the colonial policy for Spaniards. It is also comprehended that the boulevards of the City were strategically planned from its road network.

Comparing Plates 5 and 7, it is understood that basic backbone road network of the City was completed by 1913. Preparatory works in the City of Cebu for the city plan was recorded in 1912 under the section of "Improvement of the City of Cebu" in the Commission report. One can analyze, through this finding, that American Government first developed the basic transportation infrastructure, then tried to link it into the urban development of Cebu by preparing future plans. Also, from the location of Provincial Capital hall, it is possible to assume that there was a vision to establish the new CBD as well as to expand the City. It is understood that the approaches taken during American Regime were not only to install the infrastructure, but also to guide the development of the City.

Table 4 Summary Table - Transportation Infrastructure Development and Urban Development

Dev't Phase	Transportation Infrastructure Development	Urban Development	Other Development
I (1521-1860)	Grid-iron road network within the City Tartanilla	Limited development Ciudad - Segregated settlement Pattern	- Law of Indies (1573)
II (1860-1899)	Inter-island steamer	- Population growth - Influx of foreigners and foreign Offices	- Opening of port to world trade (1860)
III (1899-1941)	Road and Bridge construction and improvement (32,314 mile-1904, 3,052 miles –1905) Boulevards construction Railway (59.4 miles 1907) Port (1904-1913) First Automobile (1910-) Five transportation companies and taxicab service in the City	- Connection between east and west Establishment of City structure - Urban growth 142%up(1903-18), 224%up (1918-39) - Increase of export volume (1932 to 1936, 211% up) - Offices of internat'l trading company in Cebu by 1937 - Trade center of Visayas and the country - Vice-consulates (U.K., Japan, China, Spain, Netherlands, Norway, Sweden) - Became most populated island in 1939 census	- Road Law (1906) - Future dev't plan and beautification plan (1913-) - Urban Renewal (13ha in downtown) - Educational development (public school and English education) - Other infrastructure (water, power)
IV (1942-1970s)	- Damage on the Infrastructure 1945 (railways and road, etc.) - Infrastructure Rehabilitation - Lahug Airport - MIA (1967) - Mactan Bridge (1973- - Port Development & North Reclamation (160ha, 1969) - Diversity of Transportation	W.W.II. Destruction of the City (more than 50 %) - 180,000homeless - Establishment of foundation for the planning system in Cebu - Commercial and industrial space - Job opportunity - Increase of traffic Congestion	- Copper, coal dev't by Japanese firm - Japanese invasion - Philippine Rehabilitation Act (1946) - Nat'l Urban Planning Commission (1946) - Nat'l Planning Commission (1951) - Local Autonomy Act of 1959 (R.A. 2264) - City Planning and Development Board (1950-1960) Zoning Ordinance 102 (no trace found) - Registration system for Tartanillas
V (1970s-1990)		- Emergence of concept of Metro Cebu	- Framework Plan of 1976 - MCLUTS ('78), CVURP ('81) - SAPROF('89), MCDRPFS ('89) - MCDP('89)

However, the possibility of city's progress and the basic transportation infrastructure were once destroyed by the W.W.II. As seen in Plates 7 and 8, the city structure did not change much since the pre-war. It is considered that the reconstruction of living space was a priority but the Cebu city government did not have the financial and institutional capabilities to place the vision on its reconstruction works after the war. Transformation of the City in post war phase from the American Regime was not able to establish the foundation of the City. Although organizational foundation regarding urban planning was founded in the City after W.W.II., this did not produce any significant output for the City. Furthermore, it is also understood through the political condition of the city during immediate post war that strong leader/s who had good sense of planning and could devote himself/herself in its development for long time period did not emerge in the City.

The development of large-scale infrastructure in 1960s to 1970s established the foundation of Metro Cebu. Mactan International Airport was built and improved due to the limited expansion capability of Lahug Airport, while Mandaue-Mactan Bridge was constructed as only a ferry was the available infrastructure to connect Cebu Island and Mactan Island until the completion of the bridge. These projects were undertaken to improve accessibility, which was lacking in the area. Moreover, the rich diversity of land transportation modes during 1960s and 70s was another proof that control over transportation modes was lacking and it caused serious traffic congestion and excessive competition within the City. In addition, the creation of planning board and enactment of zoning ordinance remained as highlights in the planning history of Cebu City but their strong effect on the transformation of the City during this time was not evident. Under the fragmented planning system, therefore, transportation infrastructure development tended to be sporadic and did not have sense of the integration nor power to guide proper development.

Necessity of the Master Plan was finally recognized and the conduct of studies to prepare plans came to reality in the City in late 1970s. Short, medium, and long-terms plans had been prepared for Cebu City and Metro Cebu in 1980s and 1990s. By 1990s, the development of the City of Cebu had the directions and transportation infrastructure development has been positioned as one of the key growth factors.

8. CONCLUSION:

It was found out that the transformation of the City of Cebu during the American Regime was strongly affected by transportation infrastructure development of the area. The urban form of Cebu was drastically improved with the replacement of rules from Spain to U.S.A.. The first settlement pattern of Cebu was destroyed and new layout was placed by Spaniards. It was, then, transformed during American Regime. It is, therefore, considered that the City was "Rebuilt", which indicates that existing urban forms have been superimposed onto the past, applying different planning philosophy and utilizing new technology in its development. The City nowadays has the same basic road network with that of the pre-war. It can also be grasped that planning system observed in the process of development of Cebu is recognized as partial and fragmented, though it is considered that the planning system of the City during the American regime was relatively comprehensive. Considering the fact that transportation infrastructure was developed in order to bring prosperity to the City during the American Regime, relation between urban development and transportation infrastructure development is considered as the function of planning system. Today, the City has master plans and multi-component development projects, focusing on transportation infrastructure development. Although it is anticipated if the plans are implemented effectively, these projects contribute significantly to shaping the urban structure of the Cebu City.

Note:
*The scales of these maps were adjusted based on 'Urban Road Network (2002) Map' prepared by Cebu City GIS center.

REFERENCE

a) Books and Books Chapter

Emma H. Blair and James A. Robertson (1909), **The Philippines Islands**, 1493-1898 III, Cleveland: 274-275

Giovanni Gemelli Careri (1963) **A Voyage to the Philippines**, Filipina Book Guild, Manila: 54

Resil B. Mojares (1983) **Casa Gorordo in Cebu**, Aboitiz Foundation, Inc., Cebu: 13

Arturo G. Corpuz (1999) **The Colonial Iron Horse**, University of the Philippines Press, Quezon City: 17

C.H. Forbes-Lindsay(1906) **The Philippines Under Spanish and American Rules**, : 203

Gordon Cullen (1976) **The Concise Townscape**, Architectural Press, Oxford: 41,

Edward Relph (1999) **The Modern Urban Landscape**, Chikuma Syobou, Tokyo: 61, 245

Setsuho Ikehata & Ricaardo Trota Jose (1999) **The Philippines under Japanese Occupation**, Ateneo de Manila University Press, Quezon City: 3, 5, 132-133

Pelzer Karl (1909), **Pioneer Settlement in the Asiatic Tropics**, American Geographical Society New York: 84

b) Journal Paper

Shizuo Iwata, (1995) **Development and Sustainability of Public Transportation on Southeast Asian Cities**, EASTS, Vol. 1 1995:547-564

Paul C. Villarete, Primitivo C. Cal, (1999) **The Metro Cebu Land Use and Transport Study (MCLUTS) Revisited**, Philippine Institute of Civil Engineers Annual Convention, 1999

c) Other Documents

Michael W. Roschlau (1985) **Public Transport in the Province - A Study of Innovation, Diffusion and Conflict in the Philippines** (dissertation)

Report of the Philippine Commission, U.S. War Department, Washington 1903 (Part3: 211) 1904 (Part 3:103, 207), 1905 (Part 1: 5, Part 3:161), 1906, 1907 (Part 2:275-279) 1912:188

Census of the Philippines 1960

Déjà Vu, San Star Weekend (newspaper- Star) 06/12/1994, 09/11/1994

Ed. Conception G. Briones, **City of Cebu 1521-1977,** City Government of Cebu

Cebu City (1951), City Government of Cebu

Framework Plan of the City of Cebu, City Government of Cebu 1976:15

Danny Holganza, **Cebu Port Development and Reclamation Project**, Souvenir Program

Cebu Port Development and Reclamation Project, 1965